

CLAIMS

1. Projector lens comprising an optical element for shaping radiation fields emitted from light guides, the optical element being formed in a monolithic body which has a radiation-field-shaping region and a connecting region for the light guide which are part of the optical element, the connecting region having a connecting area for a front face of the light guide which is adapted approximately to a diameter of the light guide and is disposed offset from a vicinity of the connecting region.
2. Projector lens according to claim 1, wherein the connecting region forms a projection which goes beyond the vicinity of the connecting region.
3. Projector lens according to claim 1, wherein the connecting region is formed as a depression with respect to the vicinity of the connecting region.
4. Projector lens according to claim 1, wherein the optical element is part of a monolithic body extending beyond said element.
5. Projector lens according to claim 4, wherein the vicinity of the connecting region is formed by one side of the monolithic body.
6. Projector lens according to claim 1, wherein the monolithic body is held in a carrier which is separate from it.

7. Projector lens according to claim 6, wherein the vicinity of the connecting region is formed by one side of the carrier.
8. Projector lens according to claim 6, wherein the optical element is formed by a monolithic body which is approximately cylindrically constructed and encloses both the radiation-field-shaping region and the connecting region.
9. Projector lens according to claim 1, wherein the radiation-field-shaping region has an area curved in the manner of a lens for radiation field shaping.
10. Projector lens according to claim 1, wherein the radiation-field-shaping region has a refractive index gradient for radiation field shaping.
11. Projector lens according to claim 1, wherein the optical elements are individual optical elements.
12. Projector lens according to claim 11, wherein the individual optical elements are held by a common carrier.
13. Projector lens according to claim 1, wherein the optical elements are formed by segmental regions of a unitary monolithic body.
14. Projector lens according to claim 1, wherein the radiation-field-shaping region has boundary surfaces shaped in such a way that rays reflected on them are substantially not reflected back directly into the light guide.

15. Projector lens according to claim 14, wherein the radiation-field-shaping element acts in such a way that it does not collimate exactly.
16. Projector lens according to claim 1, wherein the light guide is connected to the connecting area of the connecting region such that it is substantially reflection-free.
17. Projector lens according to claim 1, wherein a marking is associated with each connecting region.
18. Projector lens comprising an optical element for shaping radiation fields emitted from light guides, the optical element being formed in a monolithic body which has a radiation-field-shaping region and a connecting region for the light guide which are part of the optical element, the connecting region having a connecting area for being connected to a front area of the light guide, a heatable material by means of which the material in the region of the areas to be connected can be heated up is provided in the region of the areas to be connected.
19. Projector lens according to claim 18, wherein a collar of a heatable material by means of which the material in the region of the areas to be connected can be heated up is provided in the region of the areas to be connected.
20. Projector lens according to claim 18, wherein the light guide is provided with a collar of heatable material in the region of its front face.
21. Projector lens according to claim 18, wherein the heatable material can be heated up by absorption of rays.

22. Projector lens according to claim 21, wherein the material can be heated up by laser radiation.
23. Projector lens according to claim 22, wherein the material can be heated up by laser radiation passing through the monolithic body.